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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,680	08/30/2001	Koubun Suzuki	212557US-2	9223

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EXAMINER	
BRUCKART, BENJAMIN R	

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 02/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/941,680	SUZUKI ET AL.	
	Examiner	Art Unit	
	Benjamin R Bruckart	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-109* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-109* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20010830, 20050107*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Claims 1-109 are pending in this Office Action.

Information Disclosure Statement

The information disclosure statements filed on 8/30/01 and 1/7/05 have been considered.

Foreign Priority

Receipt is acknowledged of papers submitted on 8/30/01 under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. Attention is directed to the fact that the date for which foreign priority is claimed is not the date of the filed application acknowledged in the oath or declaration. The priority date of 8/30/00 is given priority.

Specification

The attempt to incorporate subject matter into this application by reference to Japanese Patent Application No. 2000-260143 is improper because it should be claimed in the first paragraph of the specification just after the title, not the last paragraph.

Claim Objections

The claims listed below are objected to because of the following informalities:

They are repeated claims: claim 42 of claim 40 and claim 101 of claim 99.

Claim 2 ends in a semi colon instead of a period.

Claims 5, 12, 25, 26, 30, 35, 44, 50, 52, 56, 67, 69, 79, 92, 94, 103, 109 are objected to because they use the word "transmissively" which is not an English word.

Claim 51, line 9 uses the word send. This is a bad translation to English and should probably be "sent."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1, 11, 25, 26, 30, 34, 43, 50, 51, 55, 67, 68, 78, 92, 93, 102, 109 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 11, 25, 26, 30, 34, 43, 50, 51, 55, 67, 68, 78, 92, 93, 102, 109 recites the limitation "the one" in claim 1, line 16. There is insufficient antecedent basis for this limitation in the claim. Does applicant mean the one apparatus, the one group? Applicant is advised to remove and rephrase this entire limitation removing "the one" from both instances in which it appears.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 6,446,192 by Narasimhan et al ("Nara") in view of U.S. Patent No. 6,748,437 by Mankude et al.

Regarding claim 1, a remote control system configured to control a plurality of apparatuses (Nara: col. 2, lines 41-43, lines 64-67), including at least an image forming apparatus (Nara: col. 2, lines 64-67), comprising:

a central control system comprising at least a computer unit configured to receive information from said plurality of apparatuses and remotely control said plurality of apparatuses based on said information (Nara: col. 5, lines 53-58; client); and

an information collection unit configured to collect (Nara: col. 5, lines 53-58), based on said information presently received (Nara: col. 5, lines 14-20), related information from all of said plurality of apparatuses (Nara: col. 5, lines 53-58) other than the one from which said information is originally transmitted (Nara: col. 5, lines 53-58), in case when said information is received by said central control system from any one of said plurality of apparatuses to be remotely controlled (Nara: col. 5, lines 14-20; client).

The Nara reference does not explicitly state groups of devices but mentions that devices are of different types and services (Nara: col. 5, lines14-20).

The Mankude reference teaches dividing into a predetermined number of groups (Mankude: col. 8, lines 34-63).

The Mankude reference further teaches the invention groups together service objects by IP address for fault tolerant purposes (Mankude: col. 6, lines 41-51).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the remote control system as taught by Nara while dividing devices into groups as taught by Mankude in order to allow for backup redundancy of devices (Mankude: col. 6, lines 41-51).

Claims 2-10 are rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Mankude et al and Narasimhan et al.

Regarding claim 2, the remote control system according to claim 1, further comprising:

an information processing unit configured to process said information which is acquired from said plurality of apparatuses and is collected by said information collection unit (Nara: col. 9, lines 8-20; col. 10, lines 2-20); and

an information transmission unit configured to transmissively connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses and subsequently transmitting said information processed by said information processing unit (Nara: col. 10, lines 4-20);

Regarding claim 3, the remote control system according to claim 1, further comprising: an information setting unit configured to set in advance said information, for which said collection process by said information collection unit is allowed (Nara: col. 17, lines 3-20; setting network parameters; lines 47-56; col. 9, lines 50-60).

Regarding claim 4, the remote control system according to claim 1, wherein said information collected, from all of said plurality of apparatuses to be remotely controlled, by said information collection unit is related to pre-maintenance (Nara: col. 5, lines 53-58).

Regarding claim 5, the remote control system according to claim 1, wherein said information collected, from all of said plurality of apparatuses to be remotely controlled, by said information collection unit is related to expendable supplies and material (Nara: col. 5, lines 53-58; usage).

Regarding claim 6, the remote control system according to claim 1, further comprising: a group setting unit configured to set a group in advance by dividing said plurality of image forming apparatuses into a predetermined number of groups (Nara: col. 10, lines 7-14; groups by services).

Regarding claim 7, the remote control system according to claim 2, further comprising: an information alteration and addition unit configured to perform alteration and addition

onto said information processed by said information processing unit (Nara: col. 17, lines 45-56).

Regarding claim 8, the remote control system according to claim 2, further comprising: an information destination setting unit configured to set a destination of information transmission performed by said information transmission unit (Nara: col. 5, lines 14-15; device is the destination in which a connection is made; lines 39-45).

Regarding claim 9, the remote control system according to claim 2, further comprising: an information outputting unit configured to output said information processed by said information processing unit through at least one of, image formation on a display device, data recording on a paper sheet, or audible voice (Nara: col. 2, lines 64-67; copier, fax machines produce data recording on paper sheet; col. 9, lines 2-38; display device).

Regarding claim 10, the remote control system according to claim 2, further comprising: an information transmitting unit configured to transmit said information processed by said information processing unit (Nara: col. 17, lines 43-64), in case when a request for acquiring said processed information is received from any one of the terminal units (Nara: col. 10, lines 4-11).

Regarding claim 11, a remote control system configured to control a plurality of apparatuses (Nara: col. 2, lines 41-43, lines 64-67; col. 5, lines 14-20), including at least an image forming apparatus (Nara: col. 2, lines 64-67), comprising:

a central control system comprising at least a computer unit configured to receive information from said plurality of apparatuses and remotely control said plurality of apparatuses based on said information (Nara: col. 5, lines 53-58; col. 5, lines 14-17);

information accumulation unit configured to accumulate information, in case when said information is received by said central control system from any one of said

plurality of apparatuses to be remotely controlled (Nara: col. 5, lines 53-58; col. 10, lines 4-11); and

information retrieval unit configured to retrieve (Nara: col. 5, lines 53-58), based on said information presently received (Nara: col. 5, lines 14-20), related information from all of said plurality of apparatuses (Nara: col. 5, lines 53-58) included in all the groups other than the one from which said information is originally transmitted (Nara: col. 5, lines 53-58), in case when said information is received by said central control system from any one of said plurality of apparatuses (Nara: col. 5, lines 14-20; client).

The Nara reference does not explicitly state groups of devices but mentions that devices are of different types and services (Nara: col. 5, lines14-20).

The Mankude reference teaches dividing into a predetermined number of groups (Mankude: col. 8, lines 34-63).

The Mankude reference further teaches the invention groups together service objects by IP address for fault tolerant purposes (Mankude: col. 6, lines 41-51).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the remote control system as taught by Nara while dividing devices into groups as taught by Mankude in order to allow for backup redundancy of devices (Mankude: col. 6, lines 41-51).

Claims 12-24 are rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Mankude et al and Narasimhan et al.

Regarding claim 12, the remote control system according to claim 11, further comprising:

information processing unit configured to process said information which is acquired from said plurality of apparatuses and being retrieved by said information retrieval unit (Nara: col. 9, lines 8-20; col. 10, lines 2-20); and

information transmission unit configured to transmissively connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses, and subsequently transmitting said information processed by said information processing unit (Nara: col. 10, lines 2-20).

Regarding claim 13, the remote control system according to claim 11, further comprising: information setting unit configured to set in advance said information, for which said retrieval process by said information retrieval unit is allowed (Nara: col. 17, lines 3-20; setting network parameters; lines 47-56; col. 9, lines 50-60).

Regarding claim 14, the remote control system according to claim 11, wherein said information which is acquired from said plurality of apparatuses and being retrieved by said information retrieval unit is related to pre-maintenance (Nara: col. 5, lines 53-58).

Regarding claim 15, the remote control system according to claim 11, wherein said information accumulated, from all of said plurality of apparatuses to be remotely controlled, by said information accumulation unit is related to expendable supplies and material (Nara: col. 5, lines 53-58; usage).

Regarding claim 16, the remote control system according to claim 11, further comprising: a group setting unit configured to set a group in advance by dividing said plurality of image forming apparatuses into a predetermined number of groups (Nara: col. 10, lines 7-14; groups by services).

Regarding claim 17, the remote control system according to claim 16, further comprising: a plurality of communication adapters connected to said plurality of image forming apparatuses for communicating with said central control system (Nara: col. 6, lines 14-29), wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to said communication adapters (Nara: col. 5, lines 14-31; serial and parallel interfaces; col. 15, lines 36-60 MAC address).

Regarding claim 18, the remote control system according to claim 16, further comprising: a plurality of communication adapters connected to said plurality of image forming apparatuses for communicating with said central control system (Nara: col. 6, lines 10-

13), wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to a predetermined number of said respective communication adapters (Nara: col. 5, lines 14-31; col. 15, lines 36-60 MAC address).

Regarding claim 19, the remote control system according to claim 16, wherein said plurality of image forming apparatuses are interconnected by way of communication networks incorporating a network control unit (Nara: col. 5, lines 63- col. 6, line 13), and wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to an IP address in said network system (Nara: col. 5, lines 14-31; col. 17, lines 3-21; Mankude: col. 6, lines 39-44).

Regarding claim 20, the remote control system according to claim 16, wherein said plurality of image forming apparatuses are interconnected by way of communication networks incorporating a network control unit (Nara: col. 5, lines 63- col. 6, line 13), and wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to a predetermined number of IP addresses in said network system (Nara: col. 17, lines 14-21; dhcp assigned; static; Mankude: col. 6, lines 39-44).

Regarding claim 21, the remote control system according to claim 12, further comprising: information alteration and addition unit configured to perform alteration and addition onto said information processed by said information processing unit (Nara: col. 17, lines 45-56).

Regarding claim 22, the remote control system according to claim 12, further comprising: information destination unit configured to set a destination of information transmission performed by said information transmission unit (Nara: col. 5, lines 14-15; device is the destination in which a connection is made; lines 39-45).

Regarding claim 23, the remote control system according to claim 12, further comprising: information outputting unit configured to output said information processed by said information processing unit through at least one of, image formation on a display device, data recording on a paper sheet or audible voice (Nara: col. 2, lines 64-67; copier, fax machines produce data recording on paper sheet; col. 9, lines 2-38; display device).

Regarding claim 24, the remote control system according to claim 12, further comprising: information transmitting unit configured to transmit said information processed by said information processing unit (Nara: col. 17, lines 43-64), in case where a request for acquiring said processed information is received from any one of the terminal units (Nara: col. 10, lines 4-11).

Regarding claim 25, a remote control system configured to control a plurality of apparatuses divided into a predetermined number of groups (Nara: col. 2, lines 41-43, lines 64-67; col. 5, lines14-20; device types are groups), including at least an image forming apparatus (Nara: col. 2, lines 64-67), comprising:

a central control system comprising at least a computer unit configured to receive information from said plurality of apparatuses and for remotely controlling said plurality of apparatuses based on said information (Nara: col. 5, lines 53-58; client);

an information collection unit configured to collect (Nara: col. 5, lines 53-58), based on said information presently received (Nara: col. 5, lines 14-20), related information from all of said plurality of apparatuses (Nara: col. 5, lines 53-58) other then the one from which said information is originally transmitted (Nara: col. 5, lines 53-58), in case when said information is received by said central control system from any one of said plurality of apparatuses to be remotely controlled (Nara: col. 5, lines 14-20; client);

a first information processing unit configured to process said information received from any one of said plurality of apparatuses (Nara: col. 9, lines 8-20; col. 10, lines 2-20);

a first information transmission unit configured to transmissively connect to terminal units provided by a plurality of service centers so as to control said plurality of

image forming apparatuses, and subsequently transmitting said information processed by said information processing unit (Nara: col. 10, lines 4-20);

an information accumulation unit configured to accumulate information, in case when said information is received from any one of said plurality of apparatuses to be remotely controlled (Nara: col. 5, lines 53-58; col. 10, lines 4-110;

an information retrieval unit configured to retrieve, based on said information presently received, related information from all of said plurality of apparatuses other than the one from which said information is originally transmitted, in case when said information is received by said central control system from any one of said plurality of apparatuses (Nara: col. 5, lines 53-58);

a second information processing unit configured to process said information received from any one of said plurality of apparatuses and retrieved by said information retrieval unit (Nara: col. 9, lines 8-20; col. 10, lines 2-20);

a second information transmission unit configured to transmissively connect to the terminal units so as to control said plurality of image forming apparatuses, and subsequently transmitting said information processed by said information processing unit (Nara: col. 10, lines 2-20); and

an information decision unit configured to determine whether or not an execution command is send to any one of processing steps, said information collection unit, said first information processing unit, said first information transmission unit, said information retrieval unit, said second information processing unit, and said second information transmission unit (Nara: col. 2, lines 41-54; col. 10, lines 2-20).

The Nara reference does not explicitly state groups of devices but mentions that devices are of different types and services (Nara: col. 5, lines14-20).

The Mankude reference teaches dividing into a predetermined number of groups (Mankude: col. 8, lines 34-63).

The Mankude reference further teaches the invention groups together service objects by IP address for fault tolerant purposes (Mankude: col. 6, lines 41-51).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the remote control system as taught by Nara while

dividing devices into groups as taught by Mankude in order to allow for backup redundancy of devices (Mankude: col. 6, lines 41-51).

In the computer network art a the differences between a system, method, a computer accessible recording medium tangibly embodying a program of instructions, and means functions for remote and central control; are equated to the software, hardware, and actions in which the invention runs. Because many of the claims are similar in content across claim trees, the examiner has grouped the claims across as illustrated below and rejected all the limitations.

1	11	25	26	30	34	43	50	51	55	67	68	78	92	93	102	109
2	12	25			35	44	50	52	56	67	69	79	92	94	103	
3	13				36	45		53	57		70	80		95	104	
4	14										71	81				
5	15										72	82				
6	16				37	46		54	58, 63		73	83		96	105	
7	21		27	31	38	47		59			74	88		97	106	
8	22				39	48		60	64		75	89		98	107	
9	23		28	32	40, 42			61	65		76	90		99, 101		
10	24		29	33	41	49		62	66		77	91		100	108	
	17											84				
	18											85				
	19											86				
	20											87				

Therefore claims 1-109 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 6,446,192 by Narasimhan et al ("Nara") in view of U.S. Patent No. 6,748,437 by Mankude et al.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U. S. Patent No. 5,581,787 by Saeki et al teaches grouping adaptors from a fixed number of address in col. 6, lines 55-col. 7, line 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R Bruckart whose telephone number 571-272-3982. The examiner can normally be reached on 8:00-5:30 PM with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-3982.

Benjamin R Bruckart
Examiner
Art Unit 2155
brb
1/7/5

BRB

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER